

```
=> s strontium hexaferrite
    200974 STRONTIUM
      4 STRONTIUMS
    200975 STRONTIUM
      (STRONTIUM OR STRONTIUMS)
      2600 HEXAFERRITE
      1219 HEXAFERRITES
      2971 HEXAFERRITE
      (HEXAFERRITE OR HEXAFERRITES)
L1      472 STRONTIUM HEXAFERRITE
      (STRONTIUM(W)HEXAFERRITE)
```

```
=> s emulsion
    209690 EMULSION
    127556 EMULSIONS
L2      253377 EMULSION
      (EMULSION OR EMULSIONS)
```

```
=> s cosmetic
    62520 COSMETIC
    67531 COSMETICS
L3      87058 COSMETIC
      (COSMETIC OR COSMETICS)
```

```
=> s dermatol?
L4      18150 DERMATO?
```

```
=> s l3 or l4
L5      102125 L3 OR L4
```

```
=> s l1 and l2 and l5
L6      2 L1 AND L2 AND L5
```

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=> d bib abs hit
```

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L6  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:  2007:1352035  CAPLUS <<LOGINID::20071210>>
TITLE:             Ultrasound-assisted dispersion of SrFe12O19
                   nanoparticles in organic solvents and the use of the
                   dispersion as magnetic cosmetics
AUTHOR(S):         Perelshtein, I.; Perkasi, N.; Magdassi, Sh.; Zioni, T.;
                   Royz, M.; Maor, Z.; Gedanken, A.
CORPORATE SOURCE:  Department of Chemistry and Kanbar Laboratory for
                   Nanomaterials at the Bar-Ilan University Center for
                   Advanced Materials and Nanotechnology, Bar-Ilan
                   University, Ramat-Gan, 52900, Israel
SOURCE:            Journal of Nanoparticle Research (2008), 10(1),
                   191-195
                   CODEN: JNARFA; ISSN: 1388-0764
PUBLISHER:         Springer
DOCUMENT TYPE:     Journal
LANGUAGE:          English
AB  A new method of dispersing the aggregated strontium
    hexaferrite (SrFe12O19) magnetic nanoparticles in organic solvents
    such as propylene glycol monomethyl ether acetate (PGMEA), propylene
```

glycol (PG), and glycerol, by an ultrasonic bath is reported herein. The particles size of SrFe<sub>2</sub>2019 after treatment with the PGMEA is in the range 70-100 nm. The structure of dispersed SrFe<sub>2</sub>2019 was characterized using transmission electron microscopy (TEM), high resolution SEM (HR SEM) and thermo gravimetric anal. (TGA). This dispersed material was used for the preparation of a topical magnetic cosmetic product as follows: The dispersion of SrFe<sub>2</sub>2019 in PG was mixed with "Dermud-Ahava Body Cream", an oil in water' emulsion of a Dead Sea mineral cosmetic, "AHAVA", and the magnetic properties of the created composite were determined. The ferrimagnetic behavior of the composite has been demonstrated as being very similar to the behavior of strontium hexaferrite itself.

- TI Ultrasound-assisted dispersion of SrFe<sub>2</sub>2019 nanoparticles in organic solvents and the use of the dispersion as magnetic cosmetics
- AB A new method of dispersing the aggregated strontium hexaferrite (SrFe<sub>2</sub>2019) magnetic nanoparticles in organic solvents such as propylene glycol monomethyl ether acetate (PGMEA), propylene glycol (PG), and glycerol, by an ultrasonic bath is reported herein. The particles size of SrFe<sub>2</sub>2019 after treatment with the PGMEA is in the range 70-100 nm. The structure of dispersed SrFe<sub>2</sub>2019 was characterized using transmission electron microscopy (TEM), high resolution SEM (HR SEM) and thermo gravimetric anal. (TGA). This dispersed material was used for the preparation of a topical magnetic cosmetic product as follows: The dispersion of SrFe<sub>2</sub>2019 in PG was mixed with "Dermud-Ahava Body Cream", an oil in water' emulsion of a Dead Sea mineral cosmetic, "AHAVA", and the magnetic properties of the created composite were determined. The ferrimagnetic behavior of the composite has been demonstrated as being very similar to the behavior of strontium hexaferrite itself.

=> d ibib abs hit 2

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1999:101322 CAPLUS <<LOGINID:20071210>>  
 DOCUMENT NUMBER: 130:158276  
 TITLE: Cosmetic compositions with agglomerated substrates  
 INVENTOR(S): Golz-Berner, Karin; Zastrow, Leonhard  
 PATENT ASSIGNEE(S): Lancaster Group G.m.b.H., Germany  
 SOURCE: Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19734547	A1	19990204	DE 1997-19734547	19970801
DE 19734547	B4	20040819		
CA 2294933	A1	19990211	CA 1998-2294933	19980721
WO 9906012	A2	19990211	WO 1998-DE2087	19980721
WO 9906012	A3	19990422		

W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, NZ, PL, SG, SK, UA, US, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

AU 9894308	A	19990222	AU 1998-94308	19980721
EP 1003463	A2	20000531	EP 1998-947329	19980721
EP 1003463	B1	20020612		
R: DE, ES, FR, GB, IT, MC				
JP 2001511435	T	20010814	JP 2000-504829	19980721
ES 2175782	T3	20021116	ES 1998-947329	19980721
CN 1120699	B	20030910	CN 1998-807660	19980721
PL 193384	B1	20070228	PL 1987-3381	19980721
US 6309627	B1	20011030	US 2000-463878	20000131

PRIORITY APPLN. INFO.:

DE 1997-19734547	A	19970801
WO 1998-DE2087	W	19980721

- AB Sunscreen compns. containing spherical inorg. oxide particles are stabilized by addition of spherical, nonporous SiO<sub>2</sub> particles 0.05-1.5  $\mu$ m in diameter which aggregate with the oxide particles to produce particles 0.06-5  $\mu$ m in size. Compns. containing agglomerated particles in this size range spread very smoothly on the skin, reflect UV radiation very well, and provide a sun protection factor at least as high as that of other inorg. pigment-containing sunscreens with greater stability. Thus, monodisperse, nonporous, spherical SiO<sub>2</sub> particles 0.1  $\mu$ m in size were mixed in a proportion of 1:30 with spherical TiO<sub>2</sub> particles in the dry state at 35-36° and 140 rpm for 8 min, followed by addition of water and stirring at 320 rpm for 30 min to form a paste. After addition of more water, the mixture was homogenized at 3800 rpm for 20 min to produce a dispersion (viscosity .apprx.23,000 cP s) of agglomerated particles with a mean size of 0.95  $\mu$ m which was used to prepare a liquid make-up (sun protection factor 15).
- TI Cosmetic compositions with agglomerated substrates
- ST cosmetic inorg oxide particle agglomerate; silica microsphere pigment agglomerate sunscreen
- IT Agglomerates (clustered mass)
- Cosmetics
- Microspheres
- Sunscreens
- (cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (creams; cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (emulsions, sunscreen; cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (face packs; cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (gels; cosmetic compns. with agglomerated substrates)
- IT Magnetic materials
- (hard, barium and strontium hexaferrites;
- cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (lipsticks; cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (lotions; cosmetic compns. with agglomerated substrates)
- IT Cosmetics
- (makeups; cosmetic compns. with agglomerated substrates)
- IT Inorganic compounds
- Oxides (inorganic), biological studies

- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (microspheres; cosmetic compns. with agglomerated substrates)
- IT Crystals  
 (of barium and strontium hexaferrites;  
 cosmetic compns. with agglomerated substrates)
- IT Cosmetics  
 (powders, sunscreen; cosmetic compns. with agglomerated substrates)
- IT 12023-91-5, Iron strontium oxide ( $\text{Fe}_{12}\text{SrO}_{19}$ ) 12047-11-9, Barium hexaferrite  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hard magnetic single crystals; cosmetic compns. with agglomerated substrates)
- IT 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium dioxide, biological studies 1332-37-2, Iron oxide, biological studies 13463-67-7, Titanium dioxide, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (microspheres; cosmetic compns. with agglomerated substrates)
- IT 7631-86-9, Silica, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (nonporous microspheres; cosmetic compns. with agglomerated substrates)